

CLAIMS

1. Burner membrane comprising at least one layer consisting of a needled fibre web which is compressed and which has a porosity of between 60 % and 95 %, and that is constructed of heat-resistant stainless steel fibres.
2. Burner membrane according to Claim 1, in which the porosity of the needled fibre web is between 80 % and 95 %.
3. Burner membrane according to Claim 1, in which the fibre web consists of steel fibres having an equivalent diameter of between 5 μm and 150 μm .
4. Burner membrane according to Claim 3, in which the fibre web consists of steel fibres having an equivalent diameter of between 10 μm and 50 μm .
5. Burner membrane according to Claim 1, in which the weight of the fibre web is between 400 g/m^2 and 4000 g/m^2 .
6. Burner membrane according to Claim 5, in which the weight of the fibre web is between 1000 g/m^2 and 2500 g/m^2 .
7. Burner membrane according to Claim 1, which is provided with a regular pattern of perforations over at least a portion of its surface.

8. Burner membrane according to any one of the preceding claims, wherein said steel fibres are obtained by shaving the rolled edge of a roll of metal foil.

5 9. Method for manufacturing a burner membrane according to Claim 1 comprising the following steps:

- (a) providing a fibre web composed of metal fibres ;
- (b) needling the fibre web ;
- (c) compressing the needled fibre web to the desired porosity.

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10. Method for avoiding a sintering operation in the manufacture of a burner membrane, said method comprising the following steps :

- (a) providing a fibre web composed of metal fibres ;
- (b) needling the fibre web ;
- (c) compressing the needled fibre web to the desired porosity.

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11. Method according to claim 8 or 9 wherein the compressing of the needled fibre web is done to such a degree that cold weldings between the individual fibres are avoided.

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12. Use of a burner membrane according to Claims 1 or 7 as part of a surface burner for gas.